

**REMARKS**

Applicant thanks the Examiner for the thorough consideration given the present application.

Claims 7-16 are now present in this application. Claims 7 and 15 are independent. By this amendment, claims 17, 19 and 20 have been canceled.

Reconsideration of this application, as amended, is respectfully requested.

**Reasons for Entry of Amendments**

At the outset, it is respectfully requested that this Amendment be entered into the Official File in view of the fact that the amendments to the claims automatically place the application in condition for allowance.

In the alternative, if the Examiner does not agree that this application is in condition for allowance, it is respectfully requested that this Amendment be entered for the purpose of appeal. This Amendment reduces the issues on appeal by canceling rejected claims 17, 19 and 20 to obviate one of the rejections under 35 U.S.C. § 103. This Amendment was not presented at an earlier date in view of the fact that Applicants did not fully appreciate the Examiner's position until the Final Office Action was reviewed.

**Rejections under 35 U.S.C. § 103**

Claims 17, 19 and 20 stand rejected under 35 U.S.C. § 103(a) as being anticipated by U.S. Patent No. 5,904,779 to Dhindsa et al. (Dhindsa) in view of U.S. Patent 6,243,251 to Kanno. This rejection is moot in view of the cancellation of claims 17, 19 and 20.

Claims 7-10, 12, and 14-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dhindsa in view of U.S. Patent No. 6,243,251 to Kanno, and further in view of U.S. Patent No. 6,096,572 to Nakamura. Claim 11 stands rejected over Dhindsa, Kanno and Nakamura, as applied to claim 7, and further in view of U.S. Patent No. 5,874,361 to Collins et al. (Collins). Claim 13 stands rejected over Dhindsa, Kanno and Nakamura, as applied to claim 7, and further in view of U.S. Patent No. 5,985,104 to Westwood.

These rejections are respectfully traversed.

The Office Action clearly admits that Dhindsa does not disclose that its insulating member 210 is insulating vacuum tape.

In an attempt to remedy this clear deficiency of Dhindsa, the Office Action turns to Kanno, in general, and col. 17, line 55 to col. 18, which describes Fig. 14, in particular.

In Fig. 14, Kanno discloses an electrostatic chuck that has a composite structure made up of an aluminum block 34 and two electrodes 31 and 32

embedded in a dielectric film 35. A dielectric film 35 is fixed on the aluminum block 34 "through an adhesive layer 36" – see col. 17, lines 58-64.

The Office Action incorrectly concludes that "Kanno discloses the use of insulating vacuum adhesive/tape layer (36) (read on insulating tape) on the electrostatic chuck to reduce residual attraction force . . ."

Applicants have read Kanno several times and can find absolutely no disclosure of "insulating tape," as recited, or of "insulating tape . . .selected for having characteristics which do not lower a degree of vacuum," as recited.

Element 36 in Kanno is merely "an adhesive layer" and its sole disclosed purpose is to fix dielectric film 35 on aluminum block 34.

In no way does Kanno disclose adhesive layer 36 as an "insulating tape" or as something to distance an array substrate from an electrode. In Kanno's Fig. 14, both electrodes 31 and 32 are embedded in the dielectric film 35 whereas "adhesive layer 36" is below both electrodes 31 and 32, i.e., not between electrodes 31, 32 and the substrate.

The Office Action also incorrectly states that Kanno and the present invention use the same material, i.e., insulating vacuum tape/adhesive. Applicant does not claim "adhesive" but does claim "insulating tape," a feature that is clearly not disclosed by Kanno.

Additionally, Kanno does not disclose the chemical composition of his "adhesive layer" 36.

Moreover, Kanno's adhesive layer is not located between Kanno's electrodes (31 and 32) and the substrate, so it is not used for the purpose of separating the substrate from an electrode.

Also, Kanno's adhesive is not disclosed as having characteristics that lower a degree of vacuum, as recited.

Thus, even if these two references were somehow combined, they would not result in the claimed invention or anything that would render the claimed invention obvious.

Furthermore, in rejecting claims under 35 U.S.C. § 103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal

Inc. v. E-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. Note, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Eritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding." C.R. Bard, Inc. v. M3 Sys. Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory

statements about the teaching of multiple references, standing alone, are not "evidence." See In re Dembiczak, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Applicant respectfully submits that the Examiner does not provide proper motivation to modify Dhindsa in view of Kanno.

One reason alleged in the Office Action is that one of ordinary skill in the art would have the desire to modify Dhindsa by using the insulation tape because the insulating tape "will help to reduce attracting force."

First, because Dhindsa already has a dielectric layer on its lower electrode, Dhindsa demonstrates no need for insulating tape.

Second, the Examiner fails to provide objective evidence that demonstrates the desirability of using insulating tape in a device that already uses a dielectric layer to electrically insulate the chuck.

Third, Kanno does not place his adhesive layer 36 between an electrode and a substrate, so there is no way Kanno is interested in separating an electrode from a substrate by its adhesive layer.

Moreover, a factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. See, In re Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). As neither applied reference even suggests an insulating tape, let

alone an insulating tape with specific properties, as recited, the motivation for modifying Dhindsa to include an insulating tape, as recited, must be based on speculation and/or impermissible hindsight.

The Examiner tries to compare what Kanno discloses in the way of an adhesive layer with Applicant's insulating tape. Unfortunately, the relevance of what Kanno discloses and what Applicant discloses to the propriety of motivation to modify Dhindsa is not clear, and more importantly, Applicant's invention cannot be used against him in a rejection. This is known as impermissible hindsight reconstruction of Applicant's invention based on his own disclosure.

With respect to the tertiary reference, Nakamura, which is used in the rejection to show an "array substrate," the assertion that it would be obvious to modify both Dhindsa and Kanno by using an array substrate "because (sic: they are) equivalent and substitution of one for the other would produce an expected result" actually fails to show proper motivation to combine these references. Merely that the prior art can be modified in the manner suggested by the Examiner does not render the modification obvious unless the prior art suggests the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-4 (Fed. Cir, 1992). The statement of equivalency in the rejection is vague and does not state exactly what is equivalent, and

there is no objective evidence provided of a clear and particular teaching that it is desirable to use an array substrate in Dhindsa-Kanno.

In making a rejection under 35 USC § 103, the prior art as a whole must be considered. The teachings of the applied references are to be viewed as they would have been viewed by one of ordinary skill in the art. Kimberly-Clark v. Johnson & Johnson, 745 F.2d 1437, 1454, 223 USPQ 603, 614 (Fed. Cir. 1984); In re Mercier, 515 F.2d 1161, 1165, 185 USPQ 774, 778 (CCPA 1975). "It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art". In re Wesslau, 353 F.2d at 241, 147, USPQ at 393. In re Hedges, et al., 228 USPQ 685 (Fed. Cir. 1986).

Similar comments apply to the lack of proper motivation provided in the Office Action with respect to modifying the base reference combination in view of Westwood regarding the rejection of claim 13. No objective evidence of the desirability to modify the base reference combination to employ ion beam milling etching is provided. Instead, all that is provided is conclusory speculation, which is an improper basis for proper motivation to combine the applied references.



Similar comments are applicable to the rejection of claim 11, because the statement "applying DC voltages to both electrodes . . . would produce uniform high density plasma" is nothing more than a broad conclusory statement with no objective evidence presented to support it, as required by the aforementioned case law.

Furthermore, claims 8-14 depend, either directly or indirectly on independent claim 7. Because neither Dhindsa, nor Kanno, nor Nakamura discloses or suggests the above-recited features of independent claim 7, and, with respect to claims 11 and 13 because neither Collins nor Westwood is applied to provide the aforementioned deficiencies in the Dhindsa-Kanno-Nakamura reference combination, none of the combinations applied by the Examiner can render claims 7-14 obvious to one of ordinary skill in the art.

Accordingly, reconsideration and withdrawal of these art grounds of rejection are respectfully requested.

### **Conclusion**

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the

outstanding Office Action, and as such, the present application is in condition for allowance.

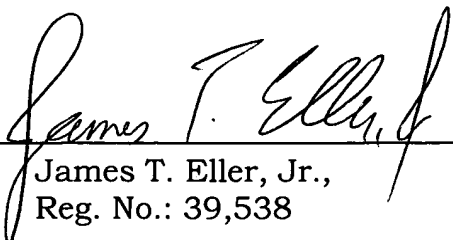
If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 51,084, at (703) 205-8000, in the Washington, D.C. area.


Prompt and favorable action on this Request for Reconsideration is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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